

What I claim as my invention is:

1. In the production of a liquid food product from protein containing solid food, a method of inactivating enzymes which may produce off-flavor volatiles, comprising:
5 disintegrating the solid food in a liquid under a pressure higher than ambient pressure, and
 concomitantly heating resulting slurry to inactivate the enzyme.
- 10 2. The method according to claim 1, comprising a further step of raising the temperature of the slurry above 100°C while disintegrating.
- 15 3. The method according to claim 2, wherein the step of raising the temperature comprises a further step of injecting steam into the slurry while disintegrating.
- 20 4. In the production of a liquid food product from protein containing solid food, a method of inactivating enzymes which may produce off-flavor volatiles, comprising:
 disintegrating the solid food in a liquid under a pressure higher than ambient pressure under oxygen-free environment, and
 concomitantly heating resulting slurry to inactivate the enzyme.
- 25 5. The method according to claim 4, comprising a further step of raising the temperature of the slurry above 100°C while disintegrating.
- 30 6. The method according to claim 5, wherein the step of raising the temperature comprises a further step of injecting steam into the slurry while disintegrating.
7. A process of continuously producing a liquid food product from protein containing solid food, the liquid food product having substantially no off-flavor volatiles, comprising steps of:

disintegrating the solid food in water under a pressure higher than the ambient pressure to produce a slurry and simultaneously heating the slurry to cooking temperature;
holding the slurry for cooking under pressure for a preset duration of time at a preset temperature;
vacuum deodorizing the cooked slurry, and
extracting the liquid food product from the deodorized slurry.

8. The method according to claim 7, further comprising a step of:
raising the temperature of the solid food above 100°C while disintegrating.
9. The process of continuously producing a liquid food product, according to claim 8, wherein the step of cooking the food slurry comprises a further step of:
injecting steam under pressure into the food slurry; and
maintaining the steam/slurry mixture at a preset temperature for a preset duration of time.
10. The method according to claim 9, wherein the step of extracting is performed with a centrifugal extractor.
11. The process of continuously producing a liquid food product, according to claim 10, wherein the step of disintegrating and heating is carried out in oxygen-free environment.
12. A process of continuously producing a liquid food product from protein containing solid food, the liquid food product having substantially no off-flavor volatiles, comprising steps of:
disintegrating the solid food in water under a pressure higher than the ambient pressure to produce a slurry and simultaneously heating the slurry to cooking temperature;
holding the slurry for cooking under pressure for a preset duration of time at a preset temperature;
extracting the liquid food product from the cooked slurry; and
vacuum deodorizing the liquid food product.

13. The method according to claim 12, further comprising a step of:
raising the temperature of the solid food above 100°C while disintegrating.

5 14. The process of continuously producing a liquid food product, according to
claim 13, wherein the step of cooking the food slurry comprises a further
step of:

10 injecting steam under pressure into the food slurry, and
maintaining the steam/slurry mixture at a preset temperature for a
preset duration of time.

15 15. The process of continuously producing a liquid food product, according to
claim 14, wherein the step of disintegrating and heating is carried out in
oxygen-free environment.

16. A system for continuously producing a liquid food product from protein
containing solid food while inactivating enzymes which may produce off-
flavor volatiles in a liquid food product, comprising:

20 a mechanical centrifugal grinder for grinding the solid food in a
liquid under a pressure higher than ambient pressure to produce a
food slurry;
a steam supply for supplying steam to the mechanical grinder to
raise the temperature of the solid food to a preset temperature;
a holding tube for holding the food slurry under pressure at a preset
25 temperature for a preset duration of time to cook the food slurry;
a vacuum deodorizer for removing the off-flavor volatile from the
cooked slurry, and
an extractor for separating the liquid food product and solid residue
from the cooked slurry.

30 17. The system for continuously producing a liquid food product according to
claim 16, wherein the extractor is of a centrifugal type.

35 18. The system for continuously producing a liquid food product according to
claim 17, further comprising:

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